

ABSTRACT

A QCTC (Quasi-Complementary Turbo Code) generating apparatus having: a turbo encoder for generating an information symbol sequence and a plurality of parity symbol sequences by encoding the information symbol sequence; a channel interleaver for individually interleaving the symbol sequences, generating new parity symbol sequences by multiplexing the symbols of parity symbol sequences with the same priority levels, and serially concatenating the information symbol sequence and the new parity symbol sequences; and a QCTC generator for generating a sub-code with a given code rate by recursively selecting a predetermined number of symbols from the concatenated symbol sequence at a given starting position.